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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,394	12/12/2003	Kazuyuki Seki	246457US2	8511
22850	7590	03/01/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NEGRON, WANDA M	
			ART UNIT	PAPER NUMBER
			2622	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/01/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/01/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/733,394

Applicant(s)

SEKI, KAZUYUKI

Examiner

Wanda M. Negrón

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

3. Figures 1 and 2 are objected to under 37 CFR 1.84(o). The examiner may require suitable descriptive legends on drawings submitted to the Office where necessary for understanding of the drawings. They should contain as few words as possible.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 2, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Bunte et al. (US 6,330,975).**

6. Regarding **claim 2**, Bunte et al. disclose in figure 9 a digital camera apparatus (900), comprising an image-inputting device (902) for inputting an image to be photographed, an image-processing device which carries out a processing of said image (930), a recognizing device which automatically recognizes the printed code included in said image, i.e. a decode processing circuit (908, 932), a displaying device for displaying a result of the recognition of said recognizing device (944), a recording device for recording data of the recognition automatically recognized by said recognizing device (910, 936), a guide-displaying device (944) which displays a most appropriate guide for recognizing a printed code, i.e. an outline that appears on the display indicating that a target code has been recognized, wherein said printed code is automatically recognized by adapting said printed code to said most appropriate guide displayed by said guide-displaying device (see col. 15, lines 22-37).

7. Regarding **claim 6**, Bunte et al. disclose that said guide-displaying device shows a minimum size necessary for carrying out the recognition to a user as a guide display, i.e. an outline on the display indicating if "the coded target is sufficient for decoding" (see col. 15, lines 22-29).

8. Regarding **claim 7**, it would have been inherent to have the transverse width of the minimum size of said guide display decided from a minimum line width of a bar code since, otherwise, the system would have not been able to decode the decodable image of said bar code shown in figure 7a.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al. (US 6,330,975).**

11. Regarding **claim 1**, Bunte et al. disclose in figure 9 a digital camera apparatus (900), comprising an image-inputting device (902) for inputting an image to be photographed, an image-processing device which carries out a processing of said image (930), a recognizing device which automatically recognizes the printed code included in said image, i.e. a decode processing circuit (908, 932), a displaying device for displaying a result of the recognition of said recognizing device (944), and a recording device for recording data of the recognition automatically recognized by said recognizing device (910, 936), wherein said recognizing device automatically recognizes said printed code of said image scanned by triggering a first release by said image inputting device (see figure 10, step 1002 and figure 11, steps 1112-1120). Bunte et al., however, do not disclose that said image scanned is recorded in a **second release** by said image inputting device.

Official notice is taken that both the concept and advantage of providing a two-step release button in a camera system are well-known in the art; the first position is commonly use for previewing the image on a display, while the second position is commonly used for recording the image as displayed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a two-step release button in the digital camera apparatus taught by Bunte et al. because the user could have previewed the coded image with its decoded data and either confirm or cancel its recording, thus preventing storage of unnecessary information in the storage area.

12. Regarding **claim 9**, Bunte et al. does not explicitly teach that a result of the recognition of said printed code makes it possible to be notified by a playback of voice. The use of audio indicators to denote recognition of a code in an image is well known in the art, e.g. a sound produced when an item is scanned at the cash register of a supermarket. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a playback of voice indicating which item had been scanned since this would have allowed the user to verify that the item was properly scanned and that it corresponds to its coded label without having to look away from the decoder display.

13. Regarding **claim 10**, Bunte et al. disclose a bar code for identification in commercial use, e.g. a parcel delivery business (see col. 23, lines 60-64 and figure 3), is included in said printed code (see figure 7a).

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14. **Claims 3-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al. (US 6,330,975) as applied to claims 1, 2, 6, 7, 9 and 10 above, and further in view of Ehrhart (US Pre-Grant Application Publication 2002/0171745 A1).**

15. Regarding **claim 3**, Bunte et al. a digital camera apparatus (900), comprising an image-inputting device (902) for inputting an image to be photographed, an image-processing device which carries out a processing of said image (930), a recognizing device which automatically recognizes the printed code included in said image, i.e. a decode processing circuit (908, 932), a displaying device for displaying a result of the recognition of said recognizing device (944), a recording device for recording data of the recognition automatically recognized by said recognizing device (910, 936), a guide-displaying device (944) which displays a most appropriate guide for recognizing a printed code, i.e. an outline that appears on the display indicating that a target code has been recognized, and a resolution setting device for setting a resolution of said image which is scanned, i.e. required circuitry for determining insufficient resolution of the coded image (see col. 15, lines 38-44). Bunte et al., however, do not disclose a code setting device for setting a kind of said printed code to be automatically recognized, wherein said printed code is automatically recognized pursuant to the displaying of the guide corresponding to the content set by said code setting device and to the resolution of said image set by said resolution setting device.

Ehrhart, on the other hand, discloses a code-setting device, i.e. a mode selector menu driver for selecting an application that decodes a bar code symbol and OCR

decodable text character (see page 8, paragraph [0061], lines 1-7). It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the functionality of the reader taught by Ehrhart in the system disclosed by Bunte et al. because the capabilities of the system would have been increased, while eliminating the need for using two different decoders.

It would have also been obvious to one having ordinary skill in the art at the time the invention was made to (a) have the displaying-guide device display the most appropriate guide in accordance with the content set by the code-setting device, and (b) to decode the printed code corresponding to the displaying of the guide and the resolution of the image because, by doing so, the user would have obtained the most accurate decoding results.

16. Regarding **claim 4**, Bunte et al. a digital camera apparatus (900), comprising an image-inputting device (902) for inputting an image to be photographed, an image-processing device which carries out a processing of said image (930), a recognizing device which automatically recognizes the printed code included in said image, i.e. a decode processing circuit (908, 932), a displaying device for displaying a result of the recognition of said recognizing device (944), a recording device for recording data of the recognition automatically recognized by said recognizing device (910, 936), a guide-displaying device (944) which displays a most appropriate guide for recognizing a printed code, i.e. an outline that appears on the display indicating that a target code has been recognized, and a resolution setting device for setting a resolution of said image which is scanned, i.e. required circuitry for determining insufficient resolution of the

coded image (see col. 15, lines 38-44), wherein a switching over of photographing modes, i.e. photo image and coded image capture modes, is automatically carried out corresponding to said most appropriate guide displayed by said guide displaying device (see col. 16, lines 55-62). Bunte et al., however, do not disclose a code setting device for setting a kind of said printed code to be automatically recognized, wherein said printed code is automatically recognized pursuant to the displaying of the guide corresponding to the content set by said code setting device and to the resolution of said image set by said resolution setting device.

Ehrhart, on the other hand, discloses a code-setting device, i.e. a mode selector menu driver for selecting an application that decodes a bar code symbol and OCR decodable text character (see page 8, paragraph [0061], lines 1-7). It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the functionality of the reader taught by Ehrhart in the system disclosed by Bunte et al. because the capabilities of the system would have been increased, while eliminating the need for using two different decoders.

It would have also been obvious to one having ordinary skill in the art at the time the invention was made to (a) have the displaying-guide device display the most appropriate guide in accordance with the content set by the code-setting device, and (b) to decode the printed code corresponding to the displaying of the guide and the resolution of the image because, by doing so, the user would have obtained the most accurate decoding results.

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17. Regarding **claim 5**, Bunte et al. discloses bar codes as possible coded targets (see figure 7a). It would have been inherent that the code-setting device sets start/stop codes, e.g. an asterisk in the commonly-used Code 39 bar code symbology, and a kind of bars, e.g. different bar widths used in bar code symbologies, as the content of the setting since without such information the bar code could not have been decoded.

18. Regarding **claim 8**, Bunte et al. disclose a digital camera apparatus (900), comprising an image-inputting device (902) for inputting an image to be photographed, an image-processing device which carries out a processing of said image (930), a recognizing device which automatically recognizes the printed code included in said image, i.e. a decode processing circuit (908, 932), a displaying device for displaying a result of the recognition of said recognizing device (944), and a recording device for recording data of the recognition automatically recognized by said recognizing device (910, 936). Bunte et al., however, do not disclose an information searching device which defines an information file where information corresponding to said printed code is included therein to an external memory and an internal memory beforehand, and searches said corresponding information after said printed code is recognized, wherein an adding of information is carried out by converting said printed code to information corresponding to said printed code.

Ehrhart, on the other hand, teaches an information searching device, i.e. a processor system (40, 70, 88-1), which defines an information file where information corresponding to said printed code is included therein to an external memory, i.e. an external image file database (see page 11, paragraph [0082], lines 15-31), and an

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internal memory, i.e. uploaded decoded-out message to reader 10' (see page 11, paragraph [0082], lines 15-31), beforehand, and searches said corresponding information after said printed code is recognized, wherein an adding of information is carried out by converting said printed code to information corresponding to said printed code (see page 10, paragraph [0081], lines 1-15).

It would have also been obvious to one having ordinary skill in the art at the time the invention was made to include the searching device taught by Ehrhart in the image capture system of Bunte et al. because it would provide the system with indexing and retrieval functions useful for verifying damaging to packages during transport (see Ehrhart, page 10, paragraph [0081]).

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hussey et al. (US 5,784,102) disclose an optical reader including an image sensor processor which sets and changes the imaging parameters used by the image sensor as necessary to meet predetermine image quality criteria.
- Itou et al. (US 6,637,662 B2) disclose a data code imaging apparatus having a touch panel for inputting a message regarding the read image.
- Meier et al. (US 6,561,428 B2) disclose an imaging device having indicia-controlled parsing mode.


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20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda M. Negrón whose telephone number is (571) 270-1129. The examiner can normally be reached on Mon-Fri 6:30 am - 4:00 pm alternate Fri off.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wanda M. Negrón
February 7, 2007



LIN YE
PRIMARY PATENT EXAMINER